

A PHOSPHOLIPASE A₂ ENZYME, ANTIBODIES AND INHIBITORS THERETO

Abstract of the Disclosure

The disclosed invention relates to a novel rPLA₂ enzyme, its antibody and use and the preparation method. The purified enzyme, derived from RBC cytosol, produces arachidonic acid dependently to calcium ion, has 42kDa of M.W. determined by SDS-PAGE analysis, shows its isoelectric point at the pH ranging 3.9 to about 4.1 in electrophoresis analysis, has maximum activity at the pH ranging 9.5 to 10 and has its specific activity of 5.6 nM/min/mg. The antibody of disclosed invention reacts with the enzyme rPLA₂ only and rPLA₂ is inactivated by EA4 compound, rPLA₂ inhibitor. The disclosed invention shows that the 42 kDa rPLA₂ identified as a novel form of Ca²⁺-dependent PLA₂ plays an important role in hemostasis, thrombosis and/or erythropoiesis through the Ca²⁺-dependent release of AA.

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